

**What Is Claimed Is:**

1 1. An earphone-based voice transmission device for receiving  
2 the voice generated by a user's eardrum and transmitting the  
3 voice to a communication device and transmitting the voice  
4 from the communication device to a receiver's ear,  
5 comprising:

6 an earplug for collecting the voice generated by the user's  
7 eardrum and transmitting a received voice to the user's ear;

8 a converter connected to the earplug for converting the  
9 voice collected by the earplug into an output electronic audio  
10 signal and converting an input electronic audio signal from the  
11 communication device to voice; and

12 an amplifier connected to the converter for amplifying and  
13 transmitting the output electronic audio signal to the  
14 communication device.

1 2. The earphone-based voice transmission device as claimed in  
2 claim 1, further comprising a voice collecting hood connected  
3 to the earplug and combined with the converter for further  
4 collecting the voice collected by the earplug and receiving the  
5 voice converted by the converter.

1 3. The earphone-based voice transmission device as claimed in  
2 claim 2, further comprising a voice transmitting tube connected  
3 to the earplug and the voice collecting hood for transmitting  
4 the voice collected by the earplug to the voice collecting hood  
5 and transmitting the voice collected by the voice collecting  
6 hood to the earplug.

